

Checklist of the fungus gnats of Finland: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae (Diptera)

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Abstract

A checklist of the 'fungus gnat' group of families in Sciaroidea: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae (Diptera) recorded from Finland. At present, the known Finnish fauna comprises 767 recognized species in 78 genera; 21 species of the family Bolitophilidae, 5 of the family Diadocidiidae, 2 of the family Ditomyiidae, 47 of the family Keroplatidae and 692 of the family Mycetophilidae. The unassigned genus *Sciarosoma* Chandler, 2002 is not included in this paper because it is listed with Sciaridae.

The most relevant synonyms, on which species were ever listed from Finland in Hackman (1980) and subsequent authors are indicated in the checklist. Eighteen species names of wrong records were removed.

Keywords

Species list, Finland, Diptera, biodiversity, faunistics

Introduction

Fungus gnats are a rich assemblage of nematocerous flies (Diptera, Nematocera) placed in the infraorder Bibionomorpha and superfamily Sciaroidea, currently divided into eight families (Blagoderov and Grimaldi 2004). Five of these families (Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae) are called informally

‘fungus gnats’ by most European authors. Species in these families are morphologically closely related and the group is also ecologically uniform.

Adults of fungus gnats are generally quite easily recognized by their habitus. They are slender to moderately robust flies between 2 and 10 mm (a few up to 15 mm) in body length, with long antenna, a high and often strongly arched thorax made distinctly higher by the long, stout and tight-sitting coxae of their legs. Their wings have reduced and variable venation that is quite distinctive for the different families and much used also to classify genera. Their body and legs are often covered with strong bristles. As larvae the majority of fungus gnat species are mycetophagous, associated with fungi, either fruiting bodies or mycelia in dead wood and soil litter.

Here I cover all the Finnish fungus gnat fauna of the families Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, and Mycetophilidae. In Europe, the superfamily Sciaroidea further includes two large families, the Sciaridae – black-winged fungus gnats and the Cecidomyiidae – gall midges (Søli et al. 2000) although some authors, e.g. Hippa and Vilkamaa (2006) consider the Cecidomyiidae as the sister group of all other Sciaroidea. They differ markedly in habitus and larval biology and are presented elsewhere. Finally, the unassigned genus *Sciarosoma* Chandler, 2002 is not included in this checklist since it is listed with the family Sciaridae according Hippa and Vilkamaa (2006), but see also opinion by Jaschhof et al. (2006).

Systematics and nomenclature of the enumeration follow the online checklist of Nordic fungus gnats (Kjærandsen 2012). Only the most relevant synonyms, on which species were ever listed from Finland, are included in the checklist.

Adults of the North European species can largely be identified using Hutson et al. (1980) and Zaitzev (1994) – Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, and Mycetophilidae in part (Mycomyiinae, Sciophilinae, Gnoristinae and Leiiinae), and Zaitzev (2003) – Mycetophilidae in part (Mycetophilinae and Manotinae). However, since many new taxa are added, and corrections, synonyms and revisions continually published, one needs a complete set of the fragmented taxonomic literature to cover all the species. A good source for obtaining most important literature on the Sciaroidea is the ViBrant/Scratchpad module Fungus Gnats Online (2014). Species identification of fungus gnats based on examination of larvae is currently impossible because the larvae seemingly lack unique morphological characteristics and search for species-specific molecular markers are yet to be implemented.

Fungus gnats are distributed all over the world with about 5,300 known species (Table 1), more than 1,450 of them are known from the Palaearctic region (Søli et al. 2000). According to the current version of the Fauna Europaea Web-database (Chandler 2004), 1,098 species of fungus gnats had then been recorded from Europe. Taking into account literature published subsequently these figures could be increased in ca 100 additional species, i.e. some 1,200 species are known in Europe at present. As opposed to many other insect groups, fungus gnats, at least Mycetophilidae, seem to display an increasing diversity towards the north in Europe, and in the European perspective, they are especially diverse in the boreal zone. The current version of the checklist of North European (Sweden, Norway, Finland, Russian Karelia, Russian Lapland, Denmark, The Faroes, and Iceland) fungus gnats (Kjærandsen 2012) includes 896 species.

Table 1. Number of species by family.

Family	Number of species (except <i>Sciarosoma</i>) in				Level of knowledge
	World (Pape et al. 2011)	Europe (Chandler 2004)	Nordic Region (Kjærandsen 2012)	Finland	
Bolitophilidae	59	36	31	21	average
Diadocidiidae	34	5	5	5	average
Ditomyiidae	94	4	3	2	average
Keroplatidae	953	110	62	47	average
Mycetophilidae	4150	942	794	692	average

In Finland, 269 species of the fungus gnats (of which ca. 40 currently recognized species were described by Carl Lundström) were first listed in the Enumeration Insectorum Fenniae (Frey et al. 1941). Hackman (1980) presented the second checklist of Finnish Diptera that incorporates 486 species of fungus gnats including five with a question mark. This list of species, with minor additions and corrections concerning Mycetophilidae after systematical revisions of the genera *Trichonta* (Gagné 1981) and *Mycomya* (Väisänen 1984) in the Holarctic region was included into Catalogue of the Palaearctic Diptera (Hackman et al. 1988). During the recent two decades, large-scale inventories (e.g. Polevoi and Jakovlev 2004, Polevoi et al. 2006, Jakovlev et al. 2006, 2014, Jakovlev and Penttinen 2007) have increased the total number of Finnish fungus gnats with ca. 300 species. The 2010 Finnish Red List assessment of fungus gnats was based on a regional species pool consisting on 734 species (Penttinen et al. 2010). At present, the Finnish fungus gnat fauna incorporates 767 recognized species (except *Sciarosoma*) and ca. 20 species awaiting descriptions. Altogether, 18 species names of wrong records from Finland were removed from the checklist. These species and 3 doubtful species names are listed in the end.

Checklist

Nematocera Dumeril, 1805
infraorder Bibionomorpha Hennig, 1954
superfamily Sciaroidea Schiner, 1864

BOLITOPHILIDAE Winnertz, 1864

BOLITOPHILA Meigen, 1818

sg. ***Bolitophila*** Meigen, 1818

Bolitophila austriaca (Mayer, 1950)

Bolitophila basicornis (Mayer, 1951)

Bolitophila caspersi Plassmann, 1956

Bolitophila cinerea Meigen, 1818

Bolitophila saundersii (Curtis, 1836)

Bolitophila tenella Winnertz, 1864

sg. ***Cliopisa*** Enderlein, 1936

Bolitophila aperta Lundström, 1915

Bolitophila bimaculata Zetterstedt, 1838

Bolitophila dubia Siebke, 1863

= *disjuncta* Loew, 1869

Bolitophila fumida Edwards, 1941

Bolitophila glabrata Loew, 1869

Bolitophila hybrida (Meigen, 1804)

Bolitophila ingrata Stackelberg, 1969

Bolitophila limitis Polevoi, 1996

Bolitophila maculipennis Walker, 1836

= *coronata* Mayer, 1951

Bolitophila modesta Lackschewitz, 1937

= *tarsata* Mayer, 1951

Bolitophila nigrolineata Landrock, 1912

Bolitophila obscurior Stackelberg, 1969

Bolitophila occlusa Edwards, 1913

Bolitophila pseudohybrida Landrock, 1912

Bolitophila rossica Landrock, 1912

DIADOCIDIIDAE Winnertz, 1864

DIADOCIDIA Ruthe, 1831

sg. Adidocidia Laštovka & Matile 1972

Diadocidia trispinosa Polevoi, 1996

Diadocidia valida Mik, 1874

sg. Diadocidia Ruthe, 1831

Diadocidia ferruginosa (Meigen, 1830)

Diadocidia fissa Zaitzev, 1994

Diadocidia spinosula Tollet, 1948

DITOMYIIDAE Keilin, 1919

SYMMERUS Walker, 1848

Symmerus annulatus (Meigen, 1830)

Symmerus nobilis Lackschewitz, 1937

KEROPLATIDAE Rondani, 1856

KEROPLATINAE Rondani, 1856

tribe Keroplatini Rondani, 1856

CEROTELION Rondani, 1856

Cerotelion striatum (Gmelin, 1790)

= *lineatum* (Fabricius, 1775) preocc.

KEROPLATUS Bosc, 1792

Keroplatus testaceus Dalman, 1818

Keroplatus tipuloides Bosc, 1792

= *sesioides* Wahlberg, 1839

* *Keroplatus tuvensis* Zaitzev, 1991 (see Notes)

ROCETELION Matile, 1988

Rocetelion humerale (Zetterstedt, 1850)

tribe Orfeliini Matile, 1990

ISONEUROMYIA Brunetti, 1912

Isoneuromyia semirufa (Meigen, 1818)

MACRORRHYNCHA Winnertz, 1846

Macrorrhyncha flava Winnertz, 1846

Macrorrhyncha rostrata (Zetterstedt, 1851)

MONOCENTROTA Edwards, 1925

Monocentrota lundstroemi Edwards, 1925

NEOPLATYURA Malloch, 1928

Neoplatyura flava (Macquart, 1826)

Neoplatyura modesta (Winnertz, 1864)

ORFELIA Costa, 1857

Orfelia discoloria (Meigen, 1818)

Orfelia falcata Zaitzev, 1994

Orfelia fasciata (Meigen, 1804)

Orfelia krivosheinae Zaitzev, 1994

Orfelia lugubris (Zetterstedt, 1851)

= *tristis* (Lundström, 1911)

Orfelia nemoralis (Meigen, 1818)

Orfelia nigricornis (Fabricius, 1805)

Orfelia ochracea (Meigen, 1818)

= *unicolor* (Staeger, 1840)

Orfelia pallida (Staeger, 1840)

PYRATULA Edwards, 1929

Pyratula perpusilla (Edwards, 1913)

Pyratula subcanariae Chandler, 2001

Pyratula zonata (Zetterstedt, 1855)

URYTALPA Edwards, 1929

Urytalpa atriceps (Edwards, 1913)

Urytalpa dorsalis (Staeger, 1840)

= *ochracea* (Meigen, 1818)

Urytalpa galdes Hedmark & Kjærandsen, 2009

Urytalpa macrocera (Edwards, 1913)

Urytalpa trivittata (Lundström, 1914)

MACROCERINAE Rondani, 1856

tribe Macrocerini Rondani, 1856

MACROCERA Meigen, 1803

Macrocerata angulata Meigen, 1818

Macrocerata centralis Meigen, 1818

Macrocerata crassicornis Winnertz, 1864

Macrocera estonica Landrock, 1924
Macrocera fasciata Meigen, 1804
Macrocera fascipennis Staeger, 1840
Macrocera grandis Lundström, 1912
 = *magna* Landrock, 1917
Macrocera lutea Meigen, 1804
Macrocera maculata Meigen, 1818
Macrocera nigricoxa Winnertz, 1864
Macrocera parva Lundström, 1914
Macrocera phalerata Meigen, 1818
Macrocera pilosa Landrock, 1917
Macrocera pumilio Loew, 1869
Macrocera pusilla Meigen, 1830
Macrocera stigma Curtis, 1837
Macrocera stigmoides Edwards, 1925
Macrocera vittata Meigen, 1830
Macrocera zetterstedti Lundström, 1914
 = *nana* Zetterstedt, 1860

MYCETOPHILIDAE Newman, 1834

MYCOMYINAE Edwards, 1925

MYCOMYA Rondani, 1856

sg. *Calomycomya* Väisänen, 1984
Mycomya avala Väisänen, 1984
Mycomya pulchella (Dziedzicki, 1885)
sg. *Coheromyia* Väisänen, 1984
Mycomya branderi Väisänen, 1984
 = *tantilla* auct. nec (Loew, 1869) misid.
sg. *Cymomya* Väisänen, 1984
Mycomya circumdata (Staeger, 1840)
sg. *Lycomya* Väisänen, 1984
Mycomya pectinifera Edwards, 1924
sg. *Mycomya* Rondani, 1856
Mycomya annulata (Meigen, 1818)
 = *incisurata* (Zetterstedt, 1838)
Mycomya bialorussica Landrock, 1925
Mycomya bicolor (Dziedzicki, 1885)
Mycomya bisulca Lackschewitz, 1937
Mycomya britteni Kidd, 1955
Mycomya brunnea (Dziedzicki, 1885)
Mycomya cinerascens (Macquart, 1826)
 = *hyalinata* (Meigen, 1830)
Mycomya collini Edwards, 1941

Mycomya danielae Matile, 1972
Mycomya denmax Väisänen, 1979
Mycomya digitifera Edwards, 1925
Mycomya disa Väisänen, 1984
Mycomya dziedzickii Väisänen, 1984
 = *fulva* (Dziedzicki, 1885) preocc.
Mycomya egregia (Dziedzicki, 1885)
Mycomya festivalis Väisänen, 1984
Mycomya flavidollis (Zetterstedt, 1852)
Mycomya forestaria Plassmann, 1978
Mycomya fuscata (Winnertz, 1864)
Mycomya griseovittata (Zetterstedt, 1852)
 = *fasciata* (Zetterstedt, 1838) preocc.
 = *clavigera* (Lundström, 1912)
Mycomya hackmani Väisänen, 1984
Mycomya heydeni Plassmann, 1970
Mycomya hians (Lundström, 1912)
Mycomya hiisi Väisänen, 1979
Mycomya humida Garrett, 1924
 = *curvata* Fisher, 1937
Mycomya indistincta Polevoi, 1995
Mycomya insignis (Winnertz, 1864)
 = *wrzesniowskii* (Dziedzicki, 1885)
Mycomya islandica Väisänen, 1984
Mycomya karelica Väisänen, 1979
Mycomya kaurii Väisänen, 1979
Mycomya kuusamoensis Väisänen, 1979
Mycomya lambi Edwards, 1941
Mycomya leporina Väisänen, 1984
Mycomya levigata (Dziedzicki, 1885)
Mycomya livida (Dziedzicki, 1885)
Mycomya maculata (Meigen, 1804)
Mycomya marginata (Meigen, 1818)
 = *limbata* (Winnertz, 1864)
Mycomya mituda Väisänen, 1980
Mycomya neohyalinata Väisänen, 1984
Mycomya nigricornis (Zetterstedt, 1852)
 = *melanoceras* Edwards, 1924
Mycomya nitida (Zetterstedt, 1852)
 = *exigua* (Winnertz, 1864)
Mycomya norna Väisänen, 1984
Mycomya occultans (Winnertz, 1864)
Mycomya ornata (Meigen, 1818)

Mycomya parva (Dziedzicki, 1885)
Mycomya prominens (Lundström, 1913)
Mycomya pseudoapicalis Landrock, 1925
Mycomya pseudocurvata Väisänen, 1979
Mycomya punctata (Meigen, 1804)
Mycomya ruficollis (Zetterstedt, 1852)
Mycomya safena Väisänen, 1984
Mycomya shermani Garrett, 1924
 = *kingi* Edwards, 1941
Mycomya shewelli Väisänen, 1984
Mycomya siebecki (Landrock, 1912)
Mycomya sieberti (Landrock, 1930)
Mycomya sigma Johannsen, 1910
 = *duplicata* Edwards, 1925
Mycomya simulans Väisänen, 1984
Mycomya spinicoxa Väisänen, 1979
Mycomya storai Väisänen, 1979
Mycomya subarctica Väisänen, 1979
Mycomya tenuis (Walker, 1856)
Mycomya thula Väisänen, 1984
Mycomya trivittata (Zetterstedt, 1838)
Mycomya tumida (Winnertz, 1864)
Mycomya vittiventris (Zetterstedt, 1852)
 = *elegans* (Lundström, 1912)
Mycomya wankowiczii (Dziedzicki, 1885)
Mycomya winnertzi (Dziedzicki, 1885)
sg. *Mycomyopsis* Väisänen, 1984
Mycomya affinis (Staeger, 1840)
 = *flava* (Winnertz, 1864)
Mycomya confusa Väisänen, 1977
Mycomya fennica Väisänen, 1979
Mycomya maura (Walker, 1856)
Mycomya neolittoralis Väisänen, 1984
Mycomya paradentata Väisänen, 1984
 = *dentata* auct. nec Fisher, 1937 misid.
Mycomya penicillata (Dziedzicki, 1885)
Mycomya permixta Väisänen, 1984
Mycomya trilineata (Zetterstedt, 1838)
 = *fusca* (Meigen, 1818)
sg. *Neomycomya* Väisänen, 1984
Mycomya fimbriata (Meigen, 1818)
NEOEMPHERIA Osten Sacken, 1878
Neoempheria bimaculata (von Roser, 1840)

Neoempheria pictipennis (Haliday, 1833)

Neoempheria striata (Meigen, 1818)

Neoempheria tuomikoskii Väisänen, 1982

Neoempheria winnertzi Edwards, 1913

SCIOPHILINAE Rondani, 1840

ACNEMIA Winnertz, 1864

Acnemia amoena Winnertz, 1864

Acnemia angusta Zaitzev, 1982

Acnemia falcata Zaitzev, 1982

Acnemia longipes Winnertz, 1864

Acnemia nitidicollis (Meigen, 1818)

Acnemia trifida Zaitzev, 1982

ALLOCOTOCERA Mik, 1886

Allocotocera pulchella (Curtis, 1837)

ANACLILEIA Meunier, 1904

Anaclileia dispar (Winnertz, 1864)

Anaclileia dziedzickii (Landrock, 1911)

AZANA Walker, 1856

sg. Azana Walker, 1856

Azana anomala (Staeger, 1840)

COELOPHTHINIA Edwards, 1941

Coelophthinia thoracica (Winnertz, 1864)

EUDICRANA Loew, 1869

Eudicrana nigriceps (Lundström, 1909)

LEPTOMORPHUS Curtis, 1831

sg. Leptomorphus Curtis, 1831

Leptomorphus forcipatus Landrock, 1918

Leptomorphus subforcipatus Zaitzev & Ševčík, 2002

= *quadrimaculatus* auct. nec Matsumura, 1910 misid. (see Notes)

Leptomorphus walkeri Curtis, 1831

MEGALOPELMA Enderlein, 1911

Megalopelma nigroclavatum (Strobl, 1910)

MONOCLONA Mik, 1886

Monoclona braueri (Strobl, 1895)

Monoclona rufilatera (Walker, 1837)

Monoclona silvatica Zaitzev, 1983

= *mikii* Kertesz, 1898 misid. (see Notes)

NEURATELIA Rondani, 1856

Neuratelia nemoralis (Meigen, 1818)

Neuratelia sintenisi Lackschewitz, 1937

PARATINIA Mik, 1874

Paratinia sciarina Mik, 1874

PHTHINIA Winnertz, 1864

Phthinia congenita Plassmann, 1984
Phthinia humilis Winnertz, 1864
Phthinia mira (Ostroverkhova, 1977)
 = *plassmanni* Caspers, 1984
Phthinia setosa Zaitzev, 1994
Phthinia winnertzi Mik, 1869
POLYLEPTA Winnertz, 1864
Polylepta borealis Lundström, 1912
Polylepta guttiventris (Zetterstedt, 1852)
SCIOPHILA Meigen, 1818
Sciophila adamsi Edwards, 1925
Sciophila antiqua Chandler, 1987
 = *hebes* auct. nec Johannsen, 1910 misid. (see Notes)
Sciophila bicuspidata Zaitzev, 1982
Sciophila buxtoni Freeman, 1956
Sciophila caesarea Chandler, 2001
Sciophila dziedzickii Edwards, 1925
Sciophila fenestella Curtis, 1837
Sciophila fuliginosa Holmgren, 1883
Sciophila geniculata Zetterstedt, 1838
Sciophila hirta Meigen, 1818
Sciophila karelica Zaitzev, 1982
Sciophila krysheni Polevoi, 2001
Sciophila limbarella Zetterstedt, 1852
Sciophila lutea Macquart, 1826
Sciophila minuta Zaitzev, 1982
Sciophila modesta Zaitzev, 1982
Sciophila nigronitida Landrock, 1925
Sciophila nonnisilva Hutson, 1979
Sciophila persubtilis Polevoi, 2001
Sciophila plurisetosa Edwards, 1921
Sciophila pomacea Chandler, 2006
 = *ochracea* Stephens in Walker, 1856 preocc.
Sciophila pseudoflexuosa Kurina, 1991
Sciophila rufa Meigen, 1830
Sciophila salassea Matile, 1983
Sciophila setosa Garrett, 1925
Sciophila thoracica Staeger, 1840
 = *quadriterga* (Hutson, 1979)
Sciophila varia (Winnertz, 1864)
Sciophila yakutica Blagoderov, 1992
GNORISTINAE Edwards, 1925
ACOMOPTERA Vockeroth, 1980

Acomptera difficilis (Dziedzicki 1885)
Acomptera spinistylus (Søli, 1993)
APOLEPHTHISA Grzegorzek, 1885
Apolephthisa subincana (Curtis, 1837)
BOLETINA Staeger, 1840
Boletina atridentata Polevoi & Hedmark, 2004
Boletina basalis (Meigen, 1818)
Boletina bidenticulata Sasakawa & Kimura, 1974
Boletina borealis Zetterstedt, 1852
Boletina brevicornis Zetterstedt, 1852
Boletina cincticornis (Walker, 1848)
Boletina cordata Polevoi & Hedmark, 2004
Boletina cornuta Zaitzev, 1994
Boletina digitata Lundström, 1914
Boletina dispecta Dziedzicki, 1885
Boletina dispectoides Jakovlev & Penttinен, 2007
Boletina dissipata Plassmann, 1986
Boletina dubia (Meigen, 1804)
Boletina edwardsi Chandler, 1992
Boletina falcata Polevoi & Hedmark, 2004
Boletina fennoscandica Polevoi & Hedmark, 2004
Boletina gripha Dziedzicki, 1885
Boletina griphoides Edwards, 1925
Boletina groenlandica Staeger, 1845
Boletina gusakovae Zaitzev, 1994
Boletina hedstroemi Polevoi & Hedmark, 2004
Boletina intermedia Lundström, 1915
Boletina jamalensis Zaitzev, 1994
 = *struthioides* Polevoi & Hedmark, 2004
Boletina kivachiana Polevoi & Hedmark, 2004
Boletina kurilensis Zaitzev, 1994
Boletina landrocki Edwards, 1924
Boletina lapponica Polevoi & Hedmark, 2004
Boletina lundbecki Lundström, 1912
Boletina lundstroemi Landrock, 1912
Boletina maculata Holmgren, 1870
 = *apicalis* (Walker, 1848) preocc.
Boletina minuta Polevoi in Zaitzev & Polevoi, 1995
Boletina moravica Landrock, 1912
Boletina nasuta (Haliday, 1839)
Boletina nigricans Dziedzicki, 1885
Boletina nigricoxa Staeger, 1840
Boletina nigrofusca Dziedzicki, 1885

Boletina nitida Grzegorzek, 1885
Boletina nitiduloides Zaitzev, 1994
Boletina onegensis Polevoi in Zaitzev & Polevoi, 1995
Boletina pallidula Edwards, 1925
Boletina palmata Polevoi, 2013
Boletina pectinunguis Edwards, 1932
Boletina pinusia Maximova, 2001
Boletina plana (Walker, 1856)
Boletina polaris Lundström, 1915
Boletina populina Polevoi in Zaitzev & Polevoi, 1995
Boletina pseudonitida Zaitzev, 1994
Boletina rejecta Edwards, 1941
Boletina sciarina Staeger, 1840
Boletina silvatica Dziedzicki, 1885
Boletina subtriangularis Polevoi & Hedmark, 2004
Boletina takagii Sasakawa & Kimura, 1974
Boletina tiroliensis Plassmann, 1980
Boletina triangularis Polevoi in Zaitzev & Polevoi, 1995
Boletina trispinosa Edwards, 1913
Boletina trivittata (Meigen, 1818)
Boletina verticillata Stackelberg, 1943
Boletina villosa Landrock, 1912
COELOSIA Winnertz, 1864
Coelosia bicornis Stackelberg, 1946
Coelosia flava (Staeger, 1840)
Coelosia fusca Bezzi, 1892
 = *silvatica* Landrock, 1918
Coelosia gracilis Johannsen, 1912
Coelosia limpida Plassmann, 1986
Coelosia tenella (Zetterstedt, 1852)
Coelosia truncata Lundström, 1909
DZIEDZICKIA Johannsen, 1909
Dziedzickia marginata (Dziedzicki, 1885)
ECTREPESTHONEURA Enderlein, 1911
Ectrepesthoneura colyeri Chandler, 1980
Ectrepesthoneura hirta (Winnertz, 1846)
Ectrepesthoneura nigra Zaitzev, 1984
Ectrepesthoneura ovata Ostroverkhova, 1977
 = *bucera* Plassmann, 1980
Ectrepesthoneura pubescens (Zetterstedt, 1860)
Ectrepesthoneura referta Plassmann, 1976
Ectrepesthoneura tori Zaitzev & Økland, 1994
GNORISTE Meigen, 1818

Gnoriste apicalis Meigen, 1818
Gnoriste bilineata Zetterstedt, 1852
GRZEGORZEKIA Edwards, 1941
Grzegorzekia collaris (Meigen, 1818)
HADRONEURA Lundström, 1906
Hadroneura palmeni Lundström, 1906
IMPLETA Plassmann, 1978
Impleta consorta Plassmann, 1978
KATATOPYGIA Martinsson & Kjærandsen, 2012
Katatopygia erythropyga (Holmgren, 1883)
Katatopygia sahlbergi (Lundström, 1906)
PALAEODOCOSIA Meunier, 1904
Palaeodocosia vittata (Coquillett, 1901)
 = *janickii* (Dziedzicki, 1923)
 = *alpicola* auct. nec (Strobl, 1894) misid. (see Notes)
SAIGUSAIA Vockeroth, 1980
Saigusaia flaviventris (Strobl, 1894)
SPEOLEPTA Edwards, 1925
Speolepta leptogaster (Winnertz, 1864)
SYNAPHA Meigen, 1818
Synapha fasciata Meigen, 1818
Synapha vitripennis (Meigen, 1818)
SYNTEMNA Winnertz, 1864
Syntemna daisetsuzana Okada, 1938
Syntemna elegantia Plassmann, 1978
Syntemna hungarica (Lundström, 1912)
Syntemna morosa Winnertz, 1864
Syntemna nitidula Edwards, 1925
Syntemna oulankaensis Polevoi, 2003
Syntemna penicilla Hutson, 1979
Syntemna relictata (Lundström, 1912)
Syntemna setigera (Lundström, 1914)
 = *haagvari* Økland, 1995
Syntemna stylata Hutson, 1979
Syntemna stylatoides Zaitzev, 1994
TETRAGONEURA Winnertz, 1846
Tetragoneura ambigua Grzegorzek, 1885
Tetragoneura obirata Plassmann, 1990
Tetragoneura pudogensis Polevoi & Jakovlev, 2011
Tetragoneura ruuhijarvii Polevoi & Jakovlev, 2011
Tetragoneura sylvatica (Curtis, 1837)
LEIINAE Edwards, 1925
CLASTOBASIS Skuse, 1890

Clastobasis alternans (Winnertz, 1864)

DOCOSIA Winnertz, 1864

Docosia expectata Laštovka & Ševčík, 2006

Docosia flavicoxa Strobl, 1900

= *pallipes* Edwards, 1941

Docosia gilvipes (Haliday in Walker, 1856)

Docosia landrocki Laštovka & Ševčík, 2006

Docosia muelleri Plassmann, 1986

Docosia tibialis Laštovka & Ševčík, 2006

GREENOMYIA Brunetti, 1912

Greenomyia baikalica Zaitzev, 1994

Greenomyia borealis (Winnertz, 1864)

Greenomyia mongolica Laštovka & Matile, 1974

LEIA Meigen, 1818

Leia bilineata (Winnertz, 1864)

Leia bimaculata (Meigen, 1804)

Leia crucigera Zetterstedt, 1838

Leia cylindrica (Winnertz, 1864)

Leia fascipennis Meigen, 1818

Leia longiseta Barendrecht, 1938

Leia picta Meigen, 1818

Leia subfasciata (Meigen, 1818)

Leia winthemii Lehmann, 1822

RONDANIELLA Johannsen, 1909

Rondaniella dimidiata (Meigen, 1804)

MANOTINAE Edwards, 1925

MANOTA Williston, 1896

Manota unifurcata Lundström, 1913

MYCETOPHILINAE Newman, 1834

tribe Exechiini Edwards, 1925

ALLODIA Winnertz, 1864

sg. **Allodia** Winnertz, 1864

Allodia anglofennica Edwards, 1921

Allodia confusa Zaitzev, 2003

= *simplex* Zaitzev, 1983 preocc.

Allodia embla Hackman, 1971

Allodia lugens (Wiedemann, 1817)

Allodia lundstroemi Edwards, 1921

Allodia ornaticollis (Meigen, 1818)

Allodia pyxidiiformis Zaitzev, 1983

Allodia septentrionalis Hackman, 1971

Allodia truncata Edwards, 1921

Allodia tuomikoskii Hackman, 1971

Allodia zaitzevi Kurina, 1998
sg. *Brachycampta* Winnertz, 1864
Allodia adunca Zaitzev, 1992
Allodia alternans (Zetterstedt, 1838)
Allodia angulata (Lundström, 1913)
Allodia barbata (Lundström, 1909)
Allodia bohemica Ševčík, 2004
Allodia czernyi (Landrock, 1912)
Allodia foliifera (Strobl, 1910)
Allodia grata (Meigen, 1830)
Allodia huggerti Kjærandsen, 2007
Allodia neglecta Edwards, 1925
Allodia penicillata (Lundström, 1912)
Allodia pistillata (Lundström, 1911)
Allodia protenta Laštovka & Matile, 1974
 = *mendli* Plassmann, 1977
Allodia silvatica (Landrock, 1912)
Allodia subpistillata Ševčík, 1999
ALLODIOPSIS Tuomikoski, 1966
Allodiopsis domestica (Meigen, 1830)
Allodiopsis gracai Ševčík & Papp 2003
Allodiopsis korolevi Zaitzev, 1982
Allodiopsis pseudodomestica (Lackschewitz, 1937)
Allodiopsis rustica (Edwards, 1941)
ANATELLA Winnertz, 1864
Anatella ankeli Plassmann, 1977
Anatella aquila Zaitzev, 1989
Anatella bremia Chandler, 1994
Anatella ciliata Winnertz, 1864
Anatella crispa Zaitzev, 1994
Anatella dampfi Landrock, 1924
Anatella dentata Zaitzev, 1989
Anatella emergens Caspers, 1987
Anatella flavicauda Winnertz, 1864
Anatella flavomaculata Edwards, 1925
Anatella gibba Winnertz, 1864
Anatella lenis Dziedzicki, 1923
Anatella maritima Ostroverkhova, 1979
Anatella minuta (Staeger, 1840)
Anatella novata Dziedzicki, 1923
Anatella setigera Edwards, 1921
Anatella simpatica Dziedzicki, 1923
Anatella turi Dziedzicki, 1923

Anatella unguigera Edwards, 1921
BRACHYPEZA Winnertz, 1864
sg. *Brachypeza* Winnertz, 1864
Brachypeza armata Winnertz, 1864
Brachypeza bisignata Winnertz, 1864
= *hilaris* Winnertz, 1864 preocc.
sg. **Paracordyla** Tuomikoski, 1966
Brachypeza obscura Winnertz, 1864
BREVICORNU Marshall, 1896
Brevicornu arcticoides Caspers, 1985
Brevicornu arcticum (Lundström, 1913)
Brevicornu auriculatum (Edwards, 1925)
Brevicornu beatum (Johannsen, 1912)
Brevicornu bellum (Johannsen, 1912)
Brevicornu bipartitum Laštovka & Matile, 1974
Brevicornu canescens (Zetterstedt, 1852)
= *griseolum* auct. nec (Zetterstedt, 1852)
Brevicornu cognatum Ostroverkhova, 1979
Brevicornu fasciculatum (Lackschewitz, 1937)
Brevicornu fennicum (Landrock, 1927)
Brevicornu fissicauda (Lundström, 1911)
Brevicornu foliatum (Edwards, 1925)
Brevicornu fuscipenne (Staeger, 1840)
Brevicornu glandis Laštovka & Matile, 1974
Brevicornu griseicolle (Staeger, 1840)
Brevicornu griseolum (Zetterstedt, 1852)
= *boreale* (Lundström, 1914)
Brevicornu improvisum Zaitzev, 1992
Brevicornu kingi (Edwards, 1925)
Brevicornu luteum (Landrock, 1925)
Brevicornu melanderi Zaitzev, 1988
Brevicornu nigrofascium (Lundström, 1909)
Brevicornu occidentale Zaitzev, 1988
Brevicornu parafennicum Zaitzev in Zaitzev & Polevoi, 1995
Brevicornu proximum (Staeger, 1840)
Brevicornu rosmellitum Chandler, 2001
Brevicornu ruficorne (Meigen, 1838)
Brevicornu serenum (Winnertz, 1864)
Brevicornu sericoma (Meigen, 1830)
Brevicornu setulosum Zaitzev, 1988
Brevicornu spathulatum (Lundström, 1911)
Brevicornu verralli (Edwards, 1925)
CORDYLA Meigen, 1803

Cordyla brevicornis (Staeger, 1840)
Cordyla crassicornis Meigen, 1818
Cordyla fasciata Meigen, 1830
Cordyla fissa Edwards, 1925
Cordyla flaviceps (Staeger, 1840)
Cordyla fusca Meigen, 1804
Cordyla insonis Laštovka & Matile, 1974
Cordyla murina Winnertz, 1864
Cordyla nitens Winnertz, 1864
Cordyla nitidula Edwards, 1925
 = *bergensis* (Barendrecht, 1938)
Cordyla parvipalpis Edwards, 1925
Cordyla pusilla Edwards, 1925
 = *sixi* (Barendrecht, 1938)
Cordyla semiflava (Staeger, 1840)
EXECHIA Winnertz, 1864
Exechia bicincta (Staeger, 1840)
Exechia borealis Lundström, 1912
Exechia cincta Winnertz, 1864
Exechia confinis Winnertz, 1864
Exechia contaminata Winnertz, 1864
Exechia cornuta Lundström, 1914
Exechia dentata Lundström, 1916
Exechia dizona Edwards, 1924
Exechia dorsalis (Staeger, 1840)
Exechia exigua Lundström, 1909
Exechia festiva Winnertz, 1864
Exechia frigida (Boheman, 1865)
Exechia fusca (Meigen, 1804)
Exechia lucidula (Zetterstedt, 1838)
Exechia lundstroemi Landrock, 1923
Exechia macula Chandler, 2001
 = *maculipennis* (Stannius, 1831) preocc.
Exechia micans Laštovka & Matile, 1974
Exechia nigra Edwards, 1925
Exechia nigrofusca Lundström, 1909
Exechia nigroscutellata Landrock, 1912
Exechia papyracea Stackelberg, 1948
Exechia parva Lundström, 1909
Exechia parvula (Zetterstedt, 1852)
 = *nana* Staeger, 1840 preocc.
Exechia pectinivalva Stackelberg, 1948
Exechia pseudocincta Strobl, 1910

Exechia pseudofestiva Lackschewitz, 1937
Exechia repanda Johannsen, 1912
Exechia repandoides Caspers, 1984
Exechia separata Lundström, 1912
Exechia seriata (Meigen, 1830)
 = *pallida* Stannius, 1831
Exechia similis Laštovka & Matile, 1974
Exechia spinigera Winnertz, 1864
Exechia spinuligera Lundström, 1912
Exechia styriaca Strobl, 1898
 = *sororcula* Lackschewitz, 1937
Exechia subfrigida Laštovka & Matile, 1974
Exechia unifasciata Lackschewitz, 1937
Exechia unimaculata (Zetterstedt, 1860)
EXECHIOPSIS Tuomikoski, 1966
sg. Exechiopsis Tuomikoski, 1966
Exechiopsis aemula Plassmann, 1984
Exechiopsis clypeata (Lundström, 1911)
Exechiopsis distendens (Lackschewitz, 1937)
Exechiopsis dumitrescae (Burghelle-Balacesco, 1972)
Exechiopsis fimbriata (Lundström, 1909)
Exechiopsis forcipata Lackschewitz, 1937)
Exechiopsis grassatura (Plassmann, 1978)
Exechiopsis hammi (Edwards, 1925)
Exechiopsis indecisa (Walker, 1856)
Exechiopsis ingrlica Stackelberg, 1948
Exechiopsis intersecta (Meigen, 1818)
Exechiopsis januarii (Lundström, 1913)
Exechiopsis lackschewitziana (Stackelberg, 1948)
Exechiopsis landrocki (Lundström, 1912)
Exechiopsis ligulata (Lundström, 1913)
Exechiopsis pseudindecisa Laštovka & Matile, 1974
Exechiopsis pseudopulchella (Lundström, 1912)
Exechiopsis pulchella (Winnertz, 1864)
Exechiopsis sagittata Laštovka & Matile, 1974
Exechiopsis subulata (Winnertz, 1864)
sg. Xenexechia Tuomikoski, 1966
Exechiopsis crucigera (Lundström, 1909)
Exechiopsis davatchii Matile, 1969
Exechiopsis leptura (Meigen, 1830)
Exechiopsis membranacea (Lundström, 1912)
Exechiopsis perspicua (Johannsen, 1912)
Exechiopsis pollicata (Edwards, 1925)

Exechiopsis praedita (Plassmann, 1976)

Exechiopsis seducta (Plassmann, 1976)

Exechiopsis stylata Laštovka & Matile, 1974

MYROSIA Tuomikoski, 1966

Myrosia maculosa (Meigen, 1818)

NOTOLOPHA Tuomikoski, 1966

Notolopha brachycera (Zetterstedt, 1852)

= *tuomikoskii* (Zaitzev & Maximova, 2000)

Notolopha cristata (Staeger, 1840)

Notolopha sibirica (Zaitzev & Maximova, 2000)

PSEUDEXECHIA Tuomikoski, 1966

Pseudexechia auriveronica Chandler, 1978

Pseudexechia canalicula (Johannsen, 1912)

Pseudexechia parallelia (Edwards, 1925)

Pseudexechia pectinacea (Ostroverkhova, 1979)

Pseudexechia tristriata Stackelberg, 1969

Pseudexechia trivittata (Staeger, 1840)

PSEUDOBRACHYPEZA Tuomikoski, 1966

Pseudobrachypeza helvetica (Walker, 1856)

PSEUDORYMOSIA Tuomikoski, 1966

Pseudorymosia fovea (Dziedzicki, 1910)

= *optiva* auct. nec (Dziedzicki, 1910) misid. (see Notes)

RYMOSIA Winnertz, 1864

Rymosia acta Dziedzicki, 1910

Rymosia affinis Winnertz, 1864

= *gracilipes* Dziedzicki, 1910

Rymosia batava (Barendrecht, 1938)

Rymosia bifida Edwards, 1925

Rymosia britteni Edwards, 1925

Rymosia connexa Winnertz, 1864

Rymosia fasciata (Meigen, 1804)

Rymosia fraudatrix Dziedzicki, 1910

? = *spiniforceps* Matile, 1963

Rymosia guttata Lundström, 1912

Rymosia pinnata Ostroverkhova, 1979

Rymosia placida Winnertz, 1864

Rymosia setiger Dziedzicki, 1910

Rymosia signatipes (van der Wulp, 1859)

= *winnertzii* Barendrecht, 1938

STIGMATOMERIA Tuomikoski, 1966

Stigmatomeria crassicornis (Stannius, 1831)

SYNPLASTA Skuse, 1890

= *GYMNOGONIA* Tuomikoski, 1966

Synplasta bayardi Matile, 1971
Synplasta dulcia (Dziedzicki, 1910)
Synplasta exclusa (Dziedzicki, 1910)
= *sintenisi* (Lackschewitz, 1937)
Synplasta gracilis Winnertz, 1864
= *excogitata* auct. nec (Dziedzicki, 1910) misid. (see Notes)
Synplasta ingeniosa (Kidd 1969)
Synplasta praeformida (Dziedzicki, 1910)
Synplasta pseudingeniosa Zaitzev, 1993
Synplasta rufilatera (Edwards, 1941)
TARNANIA Tuomikoski, 1966
Tarnania fenestralis (Meigen, 1838)
Tarnania tarnanii (Dziedzicki, 1910)
tribe Mycetophilini Newman, 1834
DYNATOSOMA Winnertz, 1864
Dynatosoma cochleare Strobl, 1895
Dynatosoma dihaeta Polevoi, 1995
= *schacti* Plassmann, 1999
Dynatosoma fuscicorne (Meigen, 1818)
Dynatosoma majus Landrock, 1912
Dynatosoma nigromaculatum Lundström, 1913
= *abdominale* auct. nec Staeger, 1840
Dynatosoma nobile Loew, 1873
Dynatosoma reciprocum (Walker, 1848)
Dynatosoma rufescens (Zetterstedt, 1838)
= *bukowskii* Zaitzev, 1986
= *lutescens* (Zetterstedt, 1852)
Dynatosoma silesiacum Ševčík, 2001
Dynatosoma thoracicum (Zetterstedt, 1838)
= *norwegiense* Zaitzev & Økland, 1994
EPICYPTA Winnertz, 1864
Epicypta aterrima (Zetterstedt, 1852)
Epicypta fumigata (Dziedzicki, 1923)
Epicypta limnophila Chandler, 1981
Epicypta scatophora (Perris, 1849)
MYCETOPHILA Meigen, 1803
= *FUNGIVORA* Meigen, 1800 suppr.
Mycetophila abbreviata Landrock, 1914
Mycetophila abiecta (Laštovka, 1963)
Mycetophila adumbrata Mik, 1884
Mycetophila alea Laffoon, 1965
= *guttata* Dziedzicki, 1884

Mycetophila attensa (Laffoon, 1957)
= *uncta* Plassmann, 1999

Mycetophila autumnalis Lundström, 1909

Mycetophila bialorussica Dziedzicki, 1884

* *Mycetophila biformis* Maximova, 2002 preocc. (see Notes)

Mycetophila biusta Meigen, 1818

Mycetophila blanda Winnertz, 1864

Mycetophila bohemica (Laštovka, 1963)

Mycetophila boreocruciator Ševčík, 2003

Mycetophila brevitarsata (Laštovka, 1963)

Mycetophila caudata Staeger, 1840

Mycetophila cingulum Meigen, 1830

Mycetophila confluens Dziedzicki, 1884
= *fulva* Winnertz, 1864

Mycetophila confusa Dziedzicki, 1884
= *affluctata* Edwards, 1941

Mycetophila curviseta Lundström, 1911

Mycetophila deflexa Chandler, 2001

Mycetophila dentata Lundström, 1915

Mycetophila devioides Bechev, 1988

Mycetophila distigma Meigen, 1830
= *w-fuscum* Dziedzicki, 1884

Mycetophila dziedzickii Chandler, 1977
= *obscura* Dziedzicki, 1884 nec Walker, 1848

Mycetophila edwardsi Lundström, 1913

Mycetophila estonica Kurina, 1992

Mycetophila evanida Laštovka, 1972

Mycetophila extincta Loew, 1869
= *mikii* Dziedzicki, 1884

Mycetophila finlandica Edwards, 1913

Mycetophila flava Winnertz, 1864

Mycetophila forcipata Lundström, 1913

Mycetophila formosa Lundström, 1911

Mycetophila freyii Lundström, 1909

Mycetophila fungorum (De Geer, 1776)

Mycetophila gibbula Edwards, 1925

Mycetophila hetschkoi Landrock, 1918

Mycetophila ichneumonea Say, 1823

Mycetophila idonea Laštovka, 1972

Mycetophila immaculata (Dziedzicki, 1884)

Mycetophila laeta Walker, 1848
= *calva* Lundström, 1912

Mycetophila lapponica Lundström, 1906
Mycetophila lobulata Zaitzev, 1999
Mycetophila lubomirskii Dziedzicki, 1884
Mycetophila luctuosa Meigen, 1830
 = *modesta* Winnertz, 1864
Mycetophila magnicauda Strobl, 1895
Mycetophila marginata Winnertz, 1864
Mycetophila mitis (Johannsen, 1912)
Mycetophila mohilevensis Dziedzicki, 1884
Mycetophila monstera Maximova, 2002
Mycetophila morata Zaitzev, 1999
Mycetophila moravica Landrock, 1925
Mycetophila morosa Winnertz, 1864
Mycetophila nigrofusca Dziedzicki, 1884
Mycetophila occultans Lundström, 1913
 = *tarsata* Winnertz, 1864 preocc.
Mycetophila ocellus Walker, 1848
Mycetophila ornata Stephens, 1846
Mycetophila ostentanea Zaitzev, 1998
Mycetophila pecinai (Laštovka, 1963)
Mycetophila perpallida Chandler, 1993
Mycetophila pictula Meigen, 1830
 = *bimaculata* Fabricius, 1805 nec Meigen, 1804
Mycetophila pseudoforcipata Zaitzev, 1998
Mycetophila pumila Winnertz, 1864
Mycetophila pyrenaica Matile, 1967
Mycetophila quadra Lundström, 1909
Mycetophila ruficollis Meigen, 1818
Mycetophila schnabli (Dziedzicki, 1884)
Mycetophila sigmoides Loew, 1869
Mycetophila signata Meigen, 1830
Mycetophila signatoides Dziedzicki, 1884
 = *assimilis* Matile, 1967
Mycetophila sinuosa Plassmann & Schacht, 1999
Mycetophila sordida van der Wulp, 1874
Mycetophila stolida Walker, 1856
Mycetophila stricklandi (Laffoon, 1957)
Mycetophila strigata Staeger, 1840
Mycetophila strigatoides Landrock, 1927
Mycetophila strobli Laštovka, 1972
Mycetophila stylata (Dziedzicki, 1884)
Mycetophila sublunata Zaitzev, 1998
Mycetophila subsigillata Zaitzev, 1999

Mycetophila sumavica (Laštovka, 1963)
Mycetophila triangularis Lundström, 1912
Mycetophila trinotata Staeger, 1840
Mycetophila uliginosa Chandler, 1988
Mycetophila unguiculata Lundström, 1913
Mycetophila uninotata Zetterstedt, 1852
Mycetophila unipunctata Meigen, 1818
Mycetophila xanthopyga Winnertz, 1864
Mycetophila zetterstedtii Lundström, 1906
PHRONIA Winnertz, 1864
Phronia aviculata Lundström, 1914
Phronia avidoides Jakovlev & Polevoi, 2009
Phronia biarcuata (Becker, 1908)
 = *johannae* Steenberg, 1924
 = *praecox* Edwards, 1925
Phronia bicolor Dziedzicki, 1889
 = *fusciventris* van Duzee, 1928
Phronia borealis Hackman, 1970
Phronia braueri Dziedzicki, 1889
 = *annulata* Winnertz, 1864
Phronia caliginosa Dziedzicki, 1889
 = *trivittata* Dziedzicki, 1889
Phronia cinerascens Winnertz, 1864
Phronia conformis (Walker, 1856)
 = *girschneri* Dziedzicki, 1889
Phronia cordata Lundström, 1914
Phronia coritanica Chandler, 1992
Phronia cornuta Lundström, 1914
Phronia crassitarsus Hackman, 1970
Phronia digitata Hackman, 1970
Phronia disgrega Dziedzicki, 1889
Phronia distincta Hackman, 1970
Phronia dziedzickii Lundström, 1906
Phronia egregia Dziedzicki, 1889
Phronia electa Dziedzicki, 1889
Phronia elegans Dziedzicki, 1889
Phronia elegantula Hackman, 1970
Phronia exigua (Zetterstedt, 1852)
Phronia fennica Jakovlev & Polevoi, 2009
Phronia flavipes Winnertz, 1864
Phronia forcipata Winnertz, 1864
Phronia forcipula Winnertz, 1864
Phronia gagnei Chandler, 1992

Phronia gracilis Hackman, 1970
Phronia humeralis Winnertz, 1864
Phronia interstincta Dziedzicki, 1889
Phronia longelamellata Strobl, 1898
 = *minuta* Landrock, 1928
Phronia lutescens Hackman, 1970
Phronia maculata Dziedzicki, 1889
Phronia mutabilis Dziedzicki, 1889
Phronia mutila Lundström, 1911
Phronia nigricornis (Zetterstedt, 1852)
 = *dubia* Dziedzicki, 1889
Phronia nigripalpis Lundström, 1909
Phronia nitidiventris (van der Wulp, 1859)
 = *squalida* Winnertz, 1864
 = *vitiosa* Winnertz, 1864
Phronia notata Dziedzicki, 1889
Phronia obscura Dziedzicki, 1889
Phronia obtusa Winnertz, 1864
Phronia peculiaris Dziedzicki, 1889
Phronia persimilis Hackman, 1970
Phronia petulans Dziedzicki, 1889
Phronia portschinskyi Dziedzicki, 1889
Phronia siebeckii Dziedzicki, 1889
Phronia signata Winnertz, 1864
 = *austriaca* Winnertz, 1864
Phronia spinigera Hackman, 1970
Phronia strenua Winnertz, 1864
 = *flavicollis* Winnertz, 1864 nom. dubium
Phronia subsilvatica Hackman, 1970
Phronia sudetica Dziedzicki, 1889
Phronia sylvatica Dziedzicki, 1889
Phronia taczanowskyi Dziedzicki, 1889
Phronia tenuis Winnertz, 1864
Phronia tiefii Dziedzicki, 1889
 = *marginata* Dziedzicki, 1889
Phronia triangularis Winnertz, 1864
Phronia unica Dziedzicki, 1889
Phronia vitrea Plassmann, 1999
 = *carli* Chandler, 2001
Phronia willistoni Dziedzicki, 1889
PLATUROCYPTA Enderlein, 1910
Platurocypta punctum (Stannius, 1831)

Platurocypta testata (Edwards, 1925)

SCEPTONIA Winnertz, 1864

Sceptonia concolor Winnertz, 1864

Sceptonia costata (van der Wulp, 1859)

Sceptonia demejerei Bechev, 1997

Sceptonia flavipuncta Edwards, 1925

Sceptonia fumipes Edwards, 1925

Sceptonia fuscipalpis Edwards, 1925

Sceptonia hamata Ševčík, 2004

Sceptonia longisetosa Ševčík, 2004

Sceptonia membranacea Edwards, 1925

Sceptonia nigra (Meigen, 1804)

Sceptonia pughi Chandler, 1991

Sceptonia regni Chandler, 1991

Sceptonia tenuis Edwards, 1925

Sceptonia thaya Ševčík, 2004

TRICHONTA Winnertz, 1864

Trichonta apicalis Strobl, 1898

Trichonta atricauda (Zetterstedt, 1852)

= *adunca* Edwards, 1925

Trichonta beata Gagné, 1981

Trichonta bicolor Landrock, 1912

Trichonta bifida Lundström, 1909

Trichonta brevicauda Lundström, 1909

Trichonta canora Gagné, 1981

Trichonta clara Gagné, 1981

Trichonta comica Gagné, 1981

Trichonta comis Gagné, 1981

Trichonta concinna Gagné, 1981

Trichonta conjungens Lundström, 1909

Trichonta delicata Gagné, 1981

Trichonta eximia Gagné, 1981

Trichonta facilis Gagné, 1981

Trichonta falcata Lundström, 1911

Trichonta fissicauda (Zetterstedt, 1852)

= *claripennis* Lundström, 1914

Trichonta flavicauda Lundström, 1914

Trichonta fragilis Gagné, 1981

Trichonta fusca Landrock, 1918

Trichonta generosa Gagné, 1981

Trichonta girschneri Landrock, 1912

Trichonta hamata Mik, 1880

Trichonta icenica Edwards, 1925
Trichonta melanura (Staeger, 1840)
Trichonta nigritula Edwards, 1925
Trichonta palustris Maximova, 2002
Trichonta patens Johannsen, 1912
Trichonta perspicua van der Wulp, 1881
 = *mediastinalis* (Lundström, 1909)
Trichonta subfuscata Lundström, 1909
Trichonta submaculata (Staeger, 1840)
Trichonta subterminalis Zaitzev & Menzel, 1996
Trichonta terminalis (Walker, 1856)
* *Trichonta tristis* (Strobl, 1898) (see Notes)
Trichonta trivittata Lundström, 1916
Trichonta venosa (Staeger, 1840)
Trichonta vitta (Meigen, 1830)
Trichonta vulcani (Dziedzicki, 1889)
 = *appropinquata* (Strobl, 1900)
 ? = *trifida* Lundström, 1909 (see Notes)
Trichonta vulgaris Loew, 1869
 = *nigricauda* Lundström, 1906
ZYGOMYIA Winnertz, 1864
Zygomyia angusta Plassmann, 1977
Zygomyia humeralis (Wiedemann, 1817)
Zygomyia kiddi Chandler, 1991
Zygomyia notata (Stannius, 1831)
Zygomyia pictipennis (Staeger, 1840)
Zygomyia pseudohumeralis Caspers, 1980
Zygomyia semifusca (Meigen, 1818) (see Notes)
Zygomyia valida Winnertz, 1864
Zygomyia vara (Staeger, 1840)
Zygomyia zaitzevi Chandler, 1991

Excluded species

Bolitophilidae
Bolitophila spinigera Edwards, 1925 misidentified

Keroplatidae
Macrocerata nigropicea Lundström, 1906 not found within present borders
Macrocerata sudetica Landrock, 1924 only females, unidentifiable (see Notes)
Orfelia bicolor (Macquart, 1826) only females, unidentifiable (see Notes)

Mycetophilidae

Allodia triangularis (Strobl, 1895) misidentified
Cordyla styliforceps (Bukowski, 1934) misidentified (see Notes)
Exechiopsis unguiculata (Lundström, 1911) not found within present borders
Leptomorphus quadrimaculatus Matsumura, 1916 misidentified (see Notes)
Monoclona mikii Kertesz, 1898 misidentified (see Notes)
Mycetophila gratiosa Winnertz, 1864 misidentified (see Notes)
Mycetophila lunata Meigen, 1804 misidentified (see Notes)
Mycetophila vittipes Zetterstedt, 1852 misidentified (see Notes)
Palaeodosia alpicola (Strobl, 1895) misidentified (see Notes)
Pseudexechia trisignata (Edwards, 1913) not found within present borders
Pseudorymosia optiva (Dziedzicki, 1910) misidentified (see Notes)
Sciophila hebes Johannsen, 1910 misidentified (see Notes)
Synplasta excogitata (Dziedzicki, 1910) misidentified (see Notes)
Trichonta fidelis Gagné, 1981 mistake (see Notes)

Notes

***Cordyla styliforceps* (Bukowski, 1934)** was added to the list of Finnish insects by Silfverberg (2007) with a reference to Polevoi (2001) which most probably based on misidentified species (A.Polevoi, pers. comm).

***Leptomorphus quadrimaculatus* Matsumura, 1916** was added to the list of Finnish insects by Silfverberg (2001) with a reference to Polevoi (1995). This record has later shown to belong to *Leptomorphus subforcipatus* (Zaitzev and Ševčík 2002).

***Macrocerasudetica* Landrock, 1924** and ***Orfelia bicolor* (Macquart, 1826)** (= *basalis* Winnertz, 1864). Listed in Hackman (1980) by the only female specimen located in the collection of the Finnish Museum of Natural History “Diptera Fennica” that cannot be recognised. No further records from Finland.

***Monoclona mikii* Kertesz, 1898.** Listed in Hackman (1980) by erroneously identified male specimen of *Monoclona braueri* and by the female specimen (both are located in “Diptera Fennica”) that cannot be recognized. Later this species has been recorded from Finland under its valid name, *Monoclona silvatica* (Jakovlev et al. 2014).

***Mycetophila gratiosa* Winnertz, 1864.** Listed in Hackman (1980) by erroneously identified male specimens of *Mycetophila luctuosa* located in “Diptera Fennica”.

***Mycetophila lunata* Meigen, 1804** was interpreted broadly in old sources, and although it was confirmed by Silfverberg (2001) with a reference to Polevoi (1995) this record has later shown to belong to another related species, *M. sublunata* Zaitzev, 1999. Hence, *M. lunata* still needs to be confirmed from Finland.

***Mycetophila vittipes* Zetterstedt, 1852.** Listed in Hackman (1980) by erroneously identified male specimens of *Mycetophila vittipes*-group located in “Diptera Fennica”.

***Palaeodosia alpicola* (Strobl, 1895)** Listed in Hackman (1980) by erroneously identified male specimen of *P. vittata* located in “Diptera Fennica”.

***Pseudorymosia optiva* (Dziedzicki, 1910).** The small genus *Pseudorymosia* contains only two known Palaearctic species, *P. fovea* (Dziedzicki, 1910) and *P. optiva* (Dziedzicki, 1910), that in fact might be only one species (Zaitzev 2003). Re-examination of specimens in the “Diptera Fennica” collections formerly identified as *P. optiva* and published by Hackman (1980) revealed that all of them are in fact the widely distributed *P. fovea* as interpreted in newer determination sources (Jakovlev et al. 2006).

***Sciophila hebes* Johannsen, 1910.** Recorded by Komonen (2001) by erroneously identified specimens of *Sciophila antiqua*.

***Synplasta excogitata* (Dziedzicki, 1910).** Listed in Hackman (1980) by erroneously identified male specimen of *Synplasta gracilis*.

***Trichonta fidelis* Gagné, 1981.** Listed in Hackman (1980) with the note that *T. fidelis* Gagné was only a manuscript of Gagné (1981) at the time. Apparently Gagné changed his mind before publication and used this name for an oriental species instead (Hackman 1982).

***Zygomyia semifusca* (Meigen, 1818).** Listed in Hackman (1980) as *Mycetophila semifusca*.

Doubtful and unrecognized species

* ***Keroplatus tuvensis* Zaitzev, 1991.** This species might be a junior synonym of *Keroplatus testaceus* (Kjærandsen et al. 2007). With this reference, it was deleted from the list of Finnish insects by Silfverberg (2012), but this synonym has not been adopted in the checklist of North European fungus gnats (Kjærandsen 2012). Hereby we keep *K. tuvensis* in the Finnish checklist pending revision of the *K. testaceus* complex of species.

* ***Mycetophila biformis* Maximova, 2002** preocc. Added by Jakovlev et al. (2014). This is a junior primary homonym of *Mycetophila biformis* Duret, 1992. A replacement name will be given by the author in the near future (Yulia Maximova, pers. comm.).

* ***Trichonta tristis* (Strobl, 1898).** Judging from illustration of Dziedzicki (1889), he actually illustrated this species as *Trichonta vulcani*. This makes *vulcani* a junior synonym of *tristis*. In this case, *Trichonta trifida* Lundström, 1909 becomes the valid species that we now call *vulcani* (J. Kjærandsen, pers.comm.). Here we list *T. vulcani* and *T. tristis* as valid species sensu Zaitzev (2003), figures 107,1 and 109,5.

Species listed by Hackman (1980) with a question marks

Five species, ***Docosia flavicoxa* Strobl, 1900**, ***Cordyla bergensis* (Barendrecht, 1938)**, ***Cordyla murina* Winnertz, 1864**, ***Mycetophila lunata* Meigen, 1804** and ***Phronia petulans* Dziedzicki, 1889** were listed in the former checklist of Finnish Diptera (Hackman 1980) with a question marks. Later, Finnish records were confirmed for *D. flavicoxa* by Jakovlev et al. (2014), for *C. murina* by Jakovlev et al. (2006), and for *P. petulans* by Jakovlev and Polevoi (2009). *Cordyla bergensis* was excluded as a junior synonym of *Cordyla nitidula* (Jakovlev et al. 2006). *Mycetophila lunata* – see above.

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References

Blagoderov VA, Grimaldi D (2004) Fossil Sciaroidea (Diptera) in Cretaceous ambers, exclusive of Cecidomyiidae, Sciaridae, and Keroplatidae. American Museum Novitates 3433: 1–76.
doi: 10.1206/0003-0082(2004)433<0001:FSDICA>2.0.CO;2

Chandler PJ (2004) Fauna Europaea: Mycetophilidae. In: de Jong H (Ed) Fauna Europaea: Diptera, Nematocera. Fauna Europaea, version 2.6.2. <http://www.faunaeur.org/> [Release date 29.8.2013]

Dziedzicki H (1889) Revue des espèces européennes du genre *Phronia* Winnertz avec la description des deux genres nouveaux: *Macrobrachius* et *Megophthalmidia*. Horae societatis entomologicae rossicae 23: 404–532.

Frey R, Tiensuu L, Storå R (1941) Enumeratio Insectorum Fenniae. VI. Diptera. Helsingin hyönteisvaihtoyhdistys r.y. Helsinki, 63 pp.

Fungus Gnats Online (2014) Literature. Accessed on 18 March 2014. <http://sciaroidea.info/biblio>

Gagné RJ (1981) A monograph of *Trichonta* with a model for the distribution of Holarctic Mycetophilidae (Diptera). United States Department of Agriculture, Technical Bulletin 1638: 1–64.

Hackman W (1980) A Check List of the Finnish Diptera. I. Nematocera and Brachycera (s.str.). Notulae entomologicae 60: 17–48.

Hackman W (1982) Tillägg och rättelser till förteckningen över Finlands Diptera. Notulae entomologicae 62: 158–159.

Hackman W, Laštovka P, Matile L, Väisänen R (1988) Mycetophilidae. In: Soós A, Papp L (Eds) Catalogue of the Palaearctic Diptera. Volume 3, Ceratopogonidae–Mycetophilidae. Akadémiai Kiado, Budapest, 220–327.

Hippa H, Vilkamaa P (2006) Phylogeny of the Sciaroidea (Diptera): the implication of additional taxa and character data. Zootaxa 20: 63–68.

Hutson AM, Ackland DM, Kidd LN (1980) Mycetophilidae (Bolitophilinae, Ditiomyiinae, Diadocidiinae, Keroplatinae, Sciophilinae and Manotinae). Diptera, Nematocera. Handbooks for Identification of British Insects 9: 1–109.

Jakovlev J, Kjærandsen J, Polevoi AV (2006) Seventy species of fungus gnats new to Finland (Diptera: Mycetophilidae). Sahlbergia 11: 22–39.

Jakovlev J, Penttinen J (2007) *Boletina dispectoides* sp. n. and six other species of fungus gnats (Diptera: Mycetophilidae) new to Finland. *Entomologica fennica* 18: 21–217.

Jakovlev J, Polevoi A (2009) Two new species of the genus *Phronia* Winnertz (Diptera: Mycetophilidae) from Finland and Russian Karelia. *Entomologica fennica* 19: 199–206.

Jakovlev J, Salmela J, Polevoi A, Penttinen J, Vartija N (2014) Recent noteworthy findings of fungus gnats from Finland and northwestern Russia (Diptera: Ditomyiidae, Keroplatidae, Bolitophilidae and Mycetophilidae). *Biodiversity Data Journal* 2: e1068. doi: 10.3897/BDJ.2.e1068

Jaschhof M, Jaschhof C, Viklund B, Kallweit U (2006) On the morphology and systematic position of *Sciarosoma borealis* Chandler, based on new material from Fennoscandia (Diptera: Sciaroidea). *Studia dipterologica* 12: 231–241.

Kjærandsen J, Hedmark K, Kurina O, Polevoi AV, Økland B, Götmark F (2007) Annotated checklist of fungus gnats from Sweden (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae and Mycetophilidae). *Insect Systematics & Evolution*, Supplement 65: 1–165.

Kjærandsen J (2012) Checklist of Nordic fungus gnats (Diptera: Bolitophilidae, Diadocidiidae, Ditomyiidae, Keroplatidae, Mycetophilidae and *Sciarosoma*). 1.0. <http://sciaroidea.info/node/48341> [Updated 14.02.2014]

Komonen A (2001) Structure of insect communities inhabiting old-growth forest specialist bracket fungi. *Ecological Entomology* 26: 63–75. doi: 10.1046/j.1365-2311.2001.00295.x

Penttinen J, Ilmonen J, Jakovlev J, Salmela J, Kuusela K, Paasivirta L (2010) Sääsket–Thread-horned flies Diptera: Nematocera. In: Rassi P, Hyvärinen E, Juslén A, Mannerkoski I (Eds) The 2010 Red List of Finnish Species. Ympäristöministeriö & Suomen ympäristökeskus, Helsinki, 477–489. [http://www.ymparisto.fi/fi-FI/Ajankohtaista/Julkaisut/Erillisjulkaisut/Suomen_lajien_uhanalaisuus_Punainen_kir\(4709\)](http://www.ymparisto.fi/fi-FI/Ajankohtaista/Julkaisut/Erillisjulkaisut/Suomen_lajien_uhanalaisuus_Punainen_kir(4709))

Pape T, Blagoderov V, Mostovski MB (2011) Order Diptera Linnaeus, 1758. In: Zhang Z-Q (Ed) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. *Zootaxa* 3148: 222–229. <http://www.mapress.com/zootaxa/2011/f/zt03148p229.pdf>

Polevoi AV (1995) Fungus gnats (Diptera, Mycetophilidae) in Pirhu and Tapionaho (Ilomantsi, Finland). In: Hokkanen TJ, Ieshko E (Eds) North Karelian Biosphere Reserve, Joensuu, 159–166.

Polevoi AV (2001) The study of forest Diptera fauna in Koitajoki area. In: Hokkanen TJ (Ed) Diversity studies in Koitajoki area (North Karelian Biosphere Reserve, Ilomantsi, Finland). Metsähallitus, Vantaa, 72–85.

Polevoi AV, Jakovlev J (2004) Changes in the Finnish fauna of fungus gnats (Diptera: Mycetophilidae s. l.) since Hackman's checklist. *Sahlbergia* 9: 135–140.

Polevoi A, Jakovlev J, Zaitzev A (2006) Fungus gnats (Diptera: Bolitophilidae, Diadocidiidae, Keroplatidae and Mycetophilidae) new to Finland. *Entomologica fennica* 17: 161–169.

Silfverberg H (2001) Changes 1996–2000 in the list of Finnish insects. *Entomologica fennica* 12: 227–243.

Silfverberg H (2007) Changes 2001–2006 in the list of Finnish insects. *Entomologica fennica* 18: 82–101.

Silfverberg H (2012) Changes 2006–2011 in the list of Finnish insects. *Entomologica fennica* 23: 18–41.

Søli GEE, Vockeroth RJ, Matile L (2000) A4. Families of Sciaroidea. In: Papp L, Darvas B (Eds) Contribution to a Manual of Palaearctic Diptera. Appendix. Science Herald, Budapest, 49–92.

Väisänen R (1984) A monograph of the genus *Mycomya* Rondani in the Holarctic region (Diptera, Mycetophilidae). *Acta zoologica fennica* 177: 1–346.

Zaitzev AI (1994) Fungus-gnats (Diptera, Mycetophiloidea) of Russia and adjacent countries. Part I. Families Ditomyiidae, Bolitophilidae, Diadocidiidae, Keroplatidae, Mycetophilidae (subfamilies Mycomyiinae, Sciophilinae, Gnoristinae, Allactoneurinae, Leiinae). Nauka, Moscow, 288 pp. [in Russian]

Zaitzev AI (2003) Fungus gnats (Diptera, Sciaroidea) of the fauna of Russia and adjacent regions. Part II. *International Journal of Dipterological Research* 14: 77–386.

Zaitzev AI, Ševčík J (2002) A review of the palaearctic species of the *Leptomorphus quadrimaculatus* (Matsumura) group (Diptera: Mycetophilidae). *Acta zoologica Academiae Scientiarum Hungaricae* 48: 203–211.